

**REMARKS**

This Amendment is submitted prior to examination on the merits. Claim 1 is amended to incorporate the recitations of claims 2, 4, and 7. Claim 9 is amended to incorporate the recitation of claims 10 and 14. No new matter is introduced by this Amendment. Claims 1, 3, 5, 6, 8, 9, 11-13, and 15 are pending in the application.

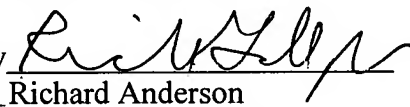
A copy of the Written Opinion of the International Searching Authority is enclosed.

The Examiner is invited to telephone Richard Gallagher (Reg. No. 28,781), at (703) 205-8008, with any questions concerning this application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: October 20, 2005

Respectfully submitted,

By  #28,781  
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Enclosure: Written Opinion

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

## PCT

To:

see form PCT/ISA/220

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/US2004/035660

International filing date (day/month/year)  
27.10.2004

Priority date (day/month/year)  
29.10.2003

International Patent Classification (IPC) or both national classification and IPC  
F16D69/02, C04B35/83, B29B11/12, B29C33/30

Applicant  
HONEYWELL INTERNATIONAL INC.

**1. This opinion contains indications relating to the following items:**

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/US2004/035660

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

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**Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

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The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 6-10

because:

☐ the said international application, or the said claims Nos.      relate to the following subject matter which does not require an international preliminary examination (*specify*):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos.      are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for the whole application or for said claims Nos. 6-10

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form

☐ has not been furnished

☐ does not comply with the standard

the computer readable form

☐ has not been furnished

☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-*bis* of the Administrative Instructions.

☐ See separate sheet for further details

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**Box No. IV Lack of unity of invention**

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1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees, the applicant has:
- ☐ paid additional fees.
  - ☐ paid additional fees under protest.
  - ☒ not paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is
- ☐ complied with
  - ☒ not complied with for the following reasons:  
**see separate sheet**
4. Consequently, this report has been established in respect of the following parts of the international application:
- ☐ all parts.
  - ☒ the parts relating to claims Nos. 1-5

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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement
- |                               |             |       |
|-------------------------------|-------------|-------|
| Novelty (N)                   | Yes: Claims | 2,4,5 |
|                               | No: Claims  | 1,3   |
| Inventive step (IS)           | Yes: Claims |       |
|                               | No: Claims  | 1-5   |
| Industrial applicability (IA) | Yes: Claims | 1-5   |
|                               | No: Claims  |       |
2. Citations and explanations
- see separate sheet**

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

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International application No.  
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**Box No. VII Certain defects in the international application**

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The following defects in the form or contents of the international application have been noted:

**see separate sheet**

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**Box No. VIII Certain observations on the international application**

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The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

1. Reference is made to the following document:

**D1:** FR 648 021 A (KIRCHBACH'SCHE WERKE KIRCHBACH & CO) 4  
December 1928 (1928-12-04)

2. As a consequence of the lack of clarity mentioned under Item VIII, paragraphs 2.1, 2.2 and 3.1 below, the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT, and therefore the criteria of Article 33(1) PCT are not met.

Document D1 discloses a preform mold apparatus "*suitable for*" brake friction components (see p. 1, col. 1, l. 1-5), which comprises a "*constraint fixture*" (see fig. 1 and 2) having a bottom plate *b* and an internal area shape being defined by a perforated annular "*ejector plate*" 20, an inner wall, an outer wall, and a perforated annular top plate *c* (see fig. 1 and 2).

**Therefore document D1 discloses all the features of claim 1.**

3. Dependent claims 2-5 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty or inventive step, the reasons being as follows:
  - 3.1 Document D1 discloses further an apparatus of claim 1, further comprising locking means 11 and 15 (see fig. 1 and 2) to maintain said top plate in place within the mold.
  - 3.2 The features of claims 2, 4 and 5 are considered to be normal constructional features.
4. Due to the lack of novelty of the subject-matter of independent claim 1, it can at present not be confirmed whether the additional features of the various dependent claims fulfill the requirements of Rules 13(1) and (2) PCT.
5. The subject-matter of claims 1-5 is susceptible of industrial application (Article 33(4) PCT).

**Re Item VII**

**Certain defects in the international application**

1. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document D1 is not mentioned in the description, nor is this document identified therein.
2. Independent claim 1 is not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (document D1) being placed in the preamble (Rule 6.3(b)(I) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).

**Re Item VIII**

**Certain observations on the international application**

1. The application does not meet the requirements of Article 6 PCT, because claims 1 and 3 are not clear.
- 2.1 The terms "*constraint fixture*" used in claim 1 is vague and unclear and leaves the reader in doubt as to the meaning of the technical feature to which it refers, thereby rendering the definition of the subject-matter of said claim unclear, Article 6 PCT.
- 2.2 Regarding claim 1, the technical relationship between "*the ejector plate*" and the other parts of the mold is not clear and does not enable the skilled person to determine which function has to be fulfilled, thereby rendering the definition of the subject-matter of said claim unclear, Article 6 PCT.
- 2.3 Regarding claim 1, the attention of the applicant is drawn to the fact that expressions like "*apparatus for carrying out the process*" must be construed as meaning clearly "*an apparatus suitable for carrying out the process*" (see PCT Guidelines V, 5.22).



**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.

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3. Regarding claim 3, it must be considered that expressions as "*such as*" have no limiting effect on the scope of the claim. Thus, the features following such expression are to be regarded as entirely optional (see PCT Guidelines, V , 5.40).